

1 Amendments to the Claims:

2 This listing of claims will replace all prior versions, and
3 listings, of claims in the application using (Original) (Currently
4 Amended) (New) (Canceled) (Previously Presented) nomenclature, as
5 recited in the below listing of claims.

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7 1. (Currently Amended) A system for communicating a first formatted
8 data stream and a second formatted data stream through a dual
9 spectrum signal over a communication bandwidth, the system
10 comprising,

11 a first code formatter for formatting a first spreading code
12 into a first formatted code,

13 a first spreader for spectrum spreading the first formatted
14 data stream by the first formatted code into a first spread
15 spectrum signal,

16 a second code formatter for formatting a second spreading code
17 into a second formatted code,

18 a second spreader for spectrum spreading the second formatted
19 data stream by the second formatted code into a second spread
20 spectrum signal, and

21 a modulator for combining and communicating the first spread
22 spectrum signal and the second spread spectrum signal into the dual
23 spectrum signal, the first spread spectrum signal having a first
24 spectrum over the communication bandwidth and the second spread
25 spectrum signal having a second spectrum over the communication
26 bandwidth, the first spread spectrum signal and the second spread
27 spectrum signal respectively uniphase modulating a carrier, the
28 dual spectrum signal being a uniphase dual spectrum signal,

1 wherein,
2 the first code formatter is an NRZ code formatter, and
3 the second code formatter is a staggered Manchester code
4 formatter.

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8 2. (Original) The system of claim 1 wherein,
9 the first spectrum is a nonsplit spectrum with a peak within the
10 communication bandwidth, and
11 the second spectrum is a split spectrum with a null within the
12 communication bandwidth.

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14 3. (Original) The system of claim 1 wherein the system is a code
15 division multiple access system.

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17 4. (Original) The system of claim 1 having a first receiver for
18 spread spectrum despread the first spread spectrum signal and
19 the second spread spectrum signal, the first receiver comprising,
20 a first replica code formatter for formatting a first replica
21 spreading code into a first replica formatted code, the first
22 replica spreading code being a replica of the first spreading code,
23 and
24 a first despreader for spectrum despread the first spread
25 spectrum signal by the first replica formatted code into a first
26 despread signal.

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1 5. (Original) The system of claim 1 having a second receiver for
2 spread spectrum despreading the second spread spectrum signal and
3 the second spread spectrum signal, the second receiver comprising,
4 a second replica code formatter for formatting a second
5 replica spreading code into a second replica formatted code, the
6 second replica spreading code being a replica of the second
7 spreading code, and
8 a second despreader for spectrum despreading the second spread
9 spectrum signal into a second despread signal.

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1 6. (Original) The system of claim 1 further having a first receiver
2 and a second receiver,

3 the first receiver comprising,

4 a first replica code formatter for formatting a first replica
5 spreading code into a first replica formatted code, the first
6 replica spreading code being a replica of the first spreading code,
7 and

8 a first despreader for spectrum despreading the first spread
9 spectrum signal into a first despread signal, and

10 a detector for detecting the first data stream for the first
11 despread signal, and

12 the second receiver comprising,

13 a second replica code formatter for formatting a second replica
14 spreading code into a second replica formatted code, the second
15 replica spreading code being a replica of the second spreading
16 code, and

17 a second despreader for spectrum despreading the second spread
18 spectrum signal by the second replica formatted code into a second
19 despread signal.

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1 7. (Original) The system of claim 1 further comprising,

2 a first replica code formatter for formatting a first replica
3 spreading code into a first replica formatted code, the first
4 replica spreading code being a replica of the first spreading code,

5 a first desreader for spectrum desreading the first spread
6 spectrum signal into a first despread signal,

7 a second replica code formatter for formatting a second
8 replica spreading code into a second replica formatted code, the
9 second replica spreading code being a replica of the second
10 spreading code, and

11 a second desreader for spectrum desreading the second spread
12 spectrum signal into a second despread signal,

13 wherein,

14 the first code formatter is an NRZ formatter,

15 the first spread spectrum signal is a nonsplit spectrum signal,

16 the first spectrum is a nonsplit spectrum having a center peak,

17 the second code formatter is a staggered Manchester formatter,

18 the second spread spectrum signal is a split spectrum signal,

19 the second spectrum is a split spectrum having a center null,

20 the first replica code formatter is an NRZ formatter, and

21 the second replica code formatter is a staggered Manchester
22 code formatter.

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24 8. (Original) The system of claim 1 further comprising,

25 a first replica code formatter for formatting a first replica
26 spreading code into a first replica formatted code, the first
27 replica spreading code being a replica of the first spreading code,

1 a first despreaders for spectrum desreading the first spread
2 spectrum signal into a first despread signal,
3 a second replica code formatter for formatting a second
4 replica spreading code into a second replica formatted code, the
5 second replica spreading code being a replica of the second
6 spreading code, and
7 a second despreaders for spectrum desreading the second spread
8 spectrum signal into a second despread signal,
9 wherein,
10 the first code formatter is in a transmitter,
11 the first spread spectrum signal is a nonsplit spectrum signal,
12 the second code formatter is in the transmitter,
13 the second spread spectrum signal is a split spectrum signal,
14 the first replica code formatter is in a first receiver,
15 the second replica code formatter is in a second receiver,
16 the first formatted data stream is communicated between the
17 transmitter and the first receiver, and
18 the second formatted data stream is communicated between the
19 transmitter and the second receiver.

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1 9. (Original) The system of claim 1 further comprising,
2 a first replica code formatter for formatting a first replica
3 spreading code into a first replica formatted code, the first
4 replica spreading code being a replica of the first spreading code,
5 a first despreader for spectrum desreading the first spread
6 spectrum signal into a first despread signal,
7 a second replica code formatter for formatting a second
8 replica spreading code into a second replica formatted code, the
9 second replica spreading code being a replica of the second
10 spreading code, and
11 a second despreader for spectrum desreading the second spread
12 spectrum signal into a second despread signal,
13 wherein,
14 the first code formatter is an NRZ formatter,
15 the first spread spectrum signal is a nonsplit spectrum signal,
16 the second code formatter is a staggered Manchester formatter,
17 the second spread spectrum signal is a split spectrum signal,
18 the first replica code formatter is an NRZ formatter,
19 the second replica code formatter is a staggered Manchester
20 code formatter,
21 the first code formatter and the second code formatter are
22 disposed in a transmitter.

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1 10. (Original) The system of claim 1 wherein,
2 the staggered Manchester format is a staggered Biphase-L
3 format.

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5 11. (Original) The system of claim 1 wherein,
6 the staggered Manchester format is a staggered binary offset
7 carrier format.

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